

LOUDOUN COUNTY SOLID WASTE MANAGEMENT PLANNING DISTRICT
Solid Waste Management Plan Biennial Review Work Group
Report on the Initial Biennial Review of the Loudoun County Solid Waste
Management Plan
May 1, 2006

EXECUTIVE SUMMARY:

This report resulted from the conduct of the first biennial review of the Loudoun County Solid Waste Management Plan. Originally approved by the Virginia Department of Environmental Quality in 2004, the members of the Loudoun County Solid Waste Management Planning District committed to a biennial review process to ensure that the plans remained current and continued to serve District residents and businesses well. Based on their review, the Biennial Review Workgroup considers the plan responsive to District needs and finds that no significant changes are required. The Workgroup did recommend that the Board continue the revenue neutrality program at the County Landfill, add 2 additional HHW collection events, reconsider adoption of the solid waste ordinance amendments, find a way to co-site recycling dropoff centers on new public building sites, and reconsider ways to make the recycling depot at the landfill a reality.

BACKGROUND

Title 10.1-1411 of the Code of Virginia gives local governments the responsibility and authority for local solid waste management planning. The Virginia Solid Waste Management Planning Regulations (9VAC 20-130-1) were amended effective August 1, 2001, to revise requirements for such plans and established July 1, 2004, as the compliance date for adoption and submission of updated solid waste management plans (SWMPs).

The regulations required localities to develop and implement SWMPs that addressed all aspects of solid waste management and considered the handling of all types of non-hazardous solid waste generated within the locality. Plans were required to demonstrate how a 25% recycling rate would be achieved and maintained, and were to include an implementation schedule that addressed needs for a 20 year time frame. The SWMP is an element of the County Comprehensive Plan and serves as the service plan for delivering solid waste management services to a rapidly growing community

The Code and regulations required that plans be developed and adopted through a public process that includes public meetings or citizens committee, and a Board of Supervisors Public Hearing. Localities may form solid waste management planning districts. The Loudoun County Solid Waste Management Planning District (LCSWMPD) is comprised of the Towns of Lovettsville, Hillsboro, Middleburg, Round Hill, Purcellville, Hamilton, and Leesburg, and the unincorporated areas of the County.

Development and Adoption of the Solid Waste Management Plan

From 2002 to 2003, an Ad Hoc Solid Waste Management Planning Committee (the Committee), through an extensive public process, updated the Solid Waste Management Plan (SWMP) for the Loudoun County Solid Waste Management Planning District to meet the July 1, 2004 Virginia Department of Environmental Quality deadline.

The Ad hoc Committee included official representation from the County Board of Supervisors and each of the seven incorporated towns. The Committee ultimately produced a Solid Waste Management Plan (LCSWMP) for the LCSWMPD that was subsequently adopted by the Board of Supervisors and the governing body of each town, and was the first updated plan approved by the Virginia Department of Environmental Quality on April 21, 2004.

A key provision of the LCSWMP was a commitment by the members of the LCSWMPD to conduct a biennial review process, to assess the accuracy of projections and whether the plan is meeting the District's needs. To initiate that review, the Loudoun County Board of Supervisors appointed Supervisors Burton, Clem, Delgaudio, Kurtz, and Snow to Solid Waste Management Plan Biennial Review Workgroup on November 15, 2005, and named Supervisor Burton as Chair of the Workgroup. Chairman Burton subsequently requested the seven incorporated Towns to name a representative to work with the Board representatives and form the Biennial Review Work Group (BRWG).

PURPOSE AND PROCESS

The stated purpose of the biennial SWMP review was to test the validity of the assumptions and the waste generation projections. The biennial review process also assessed the status or progress in the Implementation Plan (a chapter of the approved plan) components.

The Biennial Workgroup had a similar scope as did the original ad hoc Plan group. As with the 2002-03 planning process, the biennial work group:

- reviewed population and other factors that affect waste generation,
- reviewed the current solid waste management system which is a combination of private sector and public sector activities and facilities, and
- assessed the changes that have occurred that impact the plan and the solid waste management system to determine if any of those changes warrant modification of the adopted plan.

Biennial Workgroup Review and Discussion:

The BRWG conducted their review over four meetings held as follows in the Aspen Room at 906 Trailview Boulevard in Leesburg.

- Wednesday, January 11, 2:00 – 4:30 pm
- Wednesday, January 25, 3:00 – 5:00 pm
- Wednesday, February 8, 2006 3:00 – 5:00 pm
- Wednesday, February 22, 2006 3:00 – 5:00 pm

Meetings were open to the public and outreach designed to maximize stakeholder participation in the plan review sessions was conducted. Each meeting was summarized in a written report which was distributed at the following meeting. Copies of the meeting summaries are included in **Attachment 1**. Staff provided preliminary notification to various stakeholder groups and individuals of the process. Stakeholders included: Solid Waste Facility Owners / Operators, Solid Waste Collectors (Large and Small), Residents, Businesses, County Government, Towns, Homeowners' Associations, Waste / Service Contractors, and others who generate special or regulated waste or who provide services that collect, transport, process or recycle solid waste.

There was extensive participation by the waste industry in all four meetings. There was outreach to the homeowner associations but these groups did not actively participate in the process.

Staff Presentation of Baseline Information

Over the course of the first three meetings, OSWM staff presented information on a series of topics. In each subject area, staff indicated what had changed or shifted since 2001, the base data year for the LCSWMP. The topics covered included:

- population projections
- waste generation
- the solid waste collection system in Loudoun County
- private solid waste management facilities in Loudoun County
- solid waste management facilities in other jurisdictions that are providing services to Loudoun County
- specific information regarding the County Solid Waste Management Facility-trends, financial overview, and disposal capacity issues
- status of revenue neutrality program at the LCSWMF
- recycling overview
- solid waste diversion programs
- status of achieving and maintaining a 25% recycling rate
- open dumping
- County regulation of solid waste activities

Summary of Changes in the World of Solid Waste

The baseline data year for the LCSWMP was 2001. A number of factors that are important to the solid waste system in Loudoun County have changed since that time. Data for the review included demographics from the 2004 Annual Growth Summary and

solid waste generation, collection, and disposal information for CY 2005. The solid waste information is taken directly from the quarterly solid waste management facility reports and the quarterly solid waste collectors reports. The changes presented are provided in **Attachment 2**.

Status of Key Recommendations of the LCSWMP

Throughout the staff presentations in the first three meetings, staff provided information on the progress of implementation of the Key Recommendations in the LCSWMP. These status elements were consolidated in a report and distributed in meeting 4. They are presented as **Attachment 3** to this document.

DISCUSSION AND RECOMMENDATIONS OF THE BIENNIAL REVIEW GROUP

The fourth and final meeting of the BRWG focused on topics identified by the Workgroup as warranting additional discussion and possible recommendations. Those topics included:

1. Authorization of, and funding for, additional household hazardous waste (HHW) collection events.
2. Achieving a higher level of commitment to adding additional Recycling Dropoff Centers to planned Capital Improvement Projects.
3. Re-energizing the Recycling Depot at the LCSWMP and a review of parameters to make it a reality and get a private sector partnership response.
4. Re-energizing Chapter 1080 amendments on open dumping, burning of waste, and management of inert waste, including waste dirt.
5. Is there a need for additional facility capacity in Loudoun County? If so, what types of facilities do we need, and where do we need them and why?

Following considerable discussion among the members of the BRWG and input from the Waste Industry representatives and OSWM staff, the BRWG concluded that there had not been sufficient change to warrant major changes to the adopted plan. Further, the BRWG determined that additional capacity in solid waste management facilities beyond those called for in the plan were not required, and therefore no new facilities were needed.

The BRWG did recommend that additional efforts were needed with regard to continued implementation of several key objectives in the plan. Specifically, the BRWG recommended:

- That the Board of Supervisors favorably consider funding up to 2 additional HHW collection events in FY2007;

- That the County Government place a higher priority on siting recycling Dropoff Centers on planned public projects in eastern Loudoun;
- That the Board of Supervisors continue the revenue neutrality program at the LCSWMF and for staff to maintain a balance between revenue neutrality and conservation of disposal space;
- That the Board of Supervisors revisit the adoption of amendments to Chapter 1080 recommended in the adopted Plan; and
- That the Board of Supervisors renew interest in the Recycling Depot at the landfill by forwarding the matter to the Land Use Committee to work with staff and industry to re-write the Request for private partners to garner proposals.

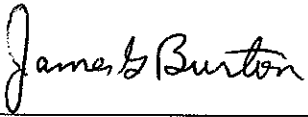




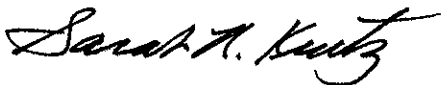
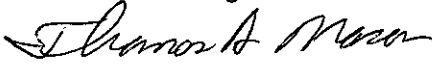
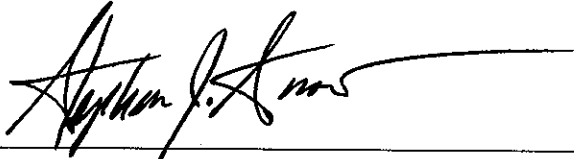

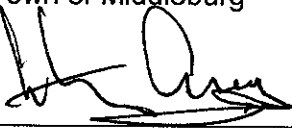
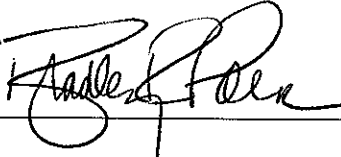
Attachments:

Attachment 1. Meeting Summaries

Attachment 2. Summary of Changes Since Plan Adoption

Attachment 3. Status of Key Initiatives & Recommendations

Respectively submitted,

<p>Supervisor Jim Burton, Blue Ridge District, Chair, Biennial Review Workgroup Board of Supervisors</p> 	<p>The Honorable Elaine Walker Mayor, Town of Lovettsville</p> 
<p>Supervisor Jim Clem, Leesburg District, Board of Supervisors</p> 	<p>The Honorable Keith Reasoner Mayor, Town of Hamilton</p> 
<p>Supervisor Eugene Delgaudio, Sterling District Board of Supervisors</p>	<p>The Honorable Roger Vance Mayor, Town of Hillsboro</p> 
<p>Supervisor Sally Kurtz, Catoclin District Board of Supervisors</p> 	<p>Tom Mason, Director of Engineering and Public Works Town of Leesburg</p> 
<p>Supervisor Steve Snow, Dulles District Board of Supervisors</p> 	<p>Marty Kloeden Assistant to the Town Manager, Town of Purcellville</p> 
	<p>Mike Casey Administrator Town of Middleburg</p> 
	<p>Kelly Yost Administrator</p>  FOR KELLY YOST

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Attachment 1. Meeting Summaries

This Attachment includes meeting summaries for the four meetings that the Biennial Review Workgroup conducted on the following dates:

- Wednesday, January 11, 2:00 – 4:30 pm
- Wednesday, January 25, 3:00 – 5:00 pm
- Wednesday, February 8, 2006 3:00 – 5:00 pm
- Wednesday, February 22, 2006 3:00 – 5:00 pm

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Attachment 2. Summary of Changes Since Plan Adoption

This Attachment includes a brief summary of the changes that impact the solid waste management system in Loudoun County that have changed since 2001, the baseline year for plan development.

- 2004 Population is 5% higher than was projected in 2001. The Loudoun County official population for CY2005 is 247,300 or approximately 10,000 more than the original plan estimate of 237,900 for the same time period.
- MSW generation for CY2005 as reported by the solid waste collection industry is less than originally projected. The LCSWMP projected 316,800 tons of MSW generation in CY2005, but the District only had about 275,000. The reduction is attributed to more accurate reporting from the collection community.
- CDD generation is greater than originally estimated. The District had no hard CDD data from the collection industry when the Plan was originally developed. An EPA factor of 2.8 pounds per person per day was used in the original plan. Two years of quarterly data is now available from the solid waste collectors which suggest that the District generated about 247,000 tons of CDD for CY2005. Approximately 28,648,000 square feet of total construction (residential and commercial) occurred in CY2004, or approximately 17 tons for every 2,000 square feet.
- No changes were reported in vegetative waste generation originally reported in the LCSWMP.
- The most significant changes in the solid waste delivery system from 2001 to 2005 are the rising cost of fuel, the shortage of CDL drivers for trucks, and wait time in traffic. These factors have made the County Solid Waste Management Facility a more desirable facility decision despite generally higher tipping fees.
- The Waste Management Transfer Station at Cochran Mill Road has been replaced with a modern facility as anticipated in the LCSWMP. The Environmental Alternatives MRF on Route 50 was not constructed as anticipated.

- The LCSWMP was originally approved conditionally by the Virginia Department of Environmental Quality since the District did not meet the mandated 25% recycling rate in 2002. The Plan acknowledged that the rate was not being met and proposed several major initiatives to increase recycling. The District was required to submit semi-annual recycling reports to DEQ demonstrating progress towards meeting the mandate as initiatives were implemented. After two such reports, DEQ lifted the conditional status and fully approved the LCSWMP in July 2005.
- The recycling dropoff center in central western Loudoun was constructed as called for in the LCSWMP and now enjoys the highest usage of any dropoff center in the County.
- The County has successfully added two additional Household Hazardous Waste (HHW) collection events per year for a total of 8 per year since the LCSWMP was adopted. Demand per event has held constant or risen.
- The County successfully implemented the Revenue Neutrality Program at the LCSWMP that was recommended in the LCSWMP. The LCSWMP now pays for all disposal operations and capital construction with disposal tipping fee revenues.
- The County released a Request for Proposal for a Private-Public Partnership proposal for the Recycling Depot at the County Solid Waste Management Facility. The County did not receive any proposals.

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Attachment 3. STATUS OF KEY INITIATIVES & RECOMMENDATIONS

This document provides a status report on progress made to address the Findings, Recommendations, and Key Initiatives contained in the adopted Loudoun County Solid Waste Management Plan for the Loudoun County Solid Waste Management Planning District.

This status report was developed as part of the initial biennial review of the plan originally adopted by District members in 2003 and was conditionally approved by the Virginia Department of Environmental Quality on April 21, 2004. Upon receipt of two semi-annual recycling rate reports from the District which demonstrated achievement of the mandated 25% recycling rate, DEQ removed the conditional status and fully approved the plan on July 29, 2005.

The Findings, Recommendations, and Key Initiatives were derived from the contents of the Ad Hoc Solid Waste Planning Committee discussion items, attachments, and minutes along with the Implementation Strategy (Chapter 7 of the Plan) and fiscal elements in Chapter 8 of the Plan and are shown in bold font. The Findings, Recommendations, and the Key Initiatives are grouped into five topical areas, Collection, Disposal, Recycling and Reuse, Environmental Protection and Planning and Public Information. The February 2006 status of each element is provided in regular font.

Key Initiatives-Solid Waste Collection

- 1. The Board of Supervisors will revise the disposal rates at the Loudoun County Solid Waste Management Facility (LCSWMF) to help sustain adequate solid waste collection services in rural areas.**

This element was addressed in July 2003 with the implementation of the Revenue Neutrality Program. Minor collectors provide the majority of collection service to the rural areas of the County. As part of the Revenue Neutrality Program, the County automatically extended the reduced contract MSW tipping rate to minor collectors using the County Solid Waste Management Facility without the administrative burden of entering a formal contract.

Key Initiatives-Disposal

- 2. The County Administrator has been directed to develop and implement a plan that balances revenue neutrality and reasonable conservation of disposal capacity at the Loudoun County Solid Waste Management Facility.**

As reported in item one, this program was implemented in July 2003 and is currently operational. Landfill tipping fee revenues currently cover disposal operations costs and construction costs of future disposal cell space and closure construction of cells that have been filled.

Key Initiatives-Recycling and Reuse

- 3. The Board of Supervisors will develop a capital improvement and funding schedule to construct and operate a Dropoff Center (DOC) in the Purcellville area, replacing three DOC sites lost in 1995.**

The Central Western Loudoun Recycling Dropoff Center was constructed and opened to the public in October 2003. It has now become the highest volume Dropoff Center in the County.

- 4. The Board of Supervisors will pursue a recyclables depot—to be located at the LCSWMF and operated as a private/public partnership—to address the lack of recycling infrastructure.**

County staff developed a request for proposal to construct and operate such a facility consistent with the operating parameters contained in the adopted Plan. This document was released in October 2004. There were no proposals received. The District still needs such a facility in the central portion of the County.

- 5. The County will pursue an Internet-based Waste Exchange program in FY2005 subject to available funding.**

Staff has identified an existing active waste exchange program called the Freecycle Network. The Freecycle Network™ www.freecycle.org/. The Freecycle Network was started in Arizona in May 2003 to promote waste reduction in Tucson's downtown. The Network provides individuals and non-profits an electronic forum to "recycle" unwanted items and is an international grassroots movement of people who are giving and getting stuff for free in their own towns. Each local group is run by a local volunteer moderator and membership in the network is free. Two links to the network have been identified in Loudoun communities. The Office of Solid Waste Management "Recycling Information" webpage at <http://www.loudoun.gov/oswm/recycle/index.htm> has links to this organization as follows:

<http://groups.yahoo.com/group/FreecycleLoudoun/>

<http://groups.yahoo.com/group/SterlingCascadesVAFreecycle/>

Key Initiatives-Environmental Protection

- 6. The Board of Supervisors should provide funding to expand the household hazardous waste (HHW) program to up to twelve annual events by fiscal year 2005**

in order to increase the opportunities and locations for residents to dispose of HHW properly. The events should be distributed geographically throughout the County.

Due to cost savings related to a re-bid of the HHW services contract, staff was able to add two events for a total of 8 events for CY2006. There is a budget enhancement proposed to add two more that will be considered by the Board of Supervisors in March-April 2006 for the FY2007 County Budget.

7. The District members recommended that the Board of Supervisors amend Chapter 1080, the Zoning Ordinance, and other appropriate County ordinances to:

- **prohibit burning of MSW;**
- **prohibit the burning of vegetative waste and CDD waste generated off-site;**
- **prohibit the burning of any solid waste or vegetative waste in the months of June, July, and August;**
- **restrict unauthorized dumping of waste dirt;**
- **regulate surface piles of waste dirt; and**
- **regulate soil processing.**

Staff prepared amendments to Chapter 1080 as recommended which were presented in a Public Hearing on January 6, 2004. Following the Public Hearing the Board referred the draft amendments to the Land Use Committee (LUC). They were never reported out of the LUC.

8. As a new initiative, the County will expand waste oil and other special waste collection to a regional site in the Western and Eastern parts of the County by fiscal year 2005, subject to available funding.

Due to cost constraints, there has been no action on this recommendation to date. Lack of opportunities for recycling of waste oil and other special wastes in the County continues to be a significant service gap in the County's Recycling Program.

Key Initiatives-Planning and Public Information

9. OSWM will conduct a biennial plan audit that will test the validity of the assumptions and waste generation projections contained in the LCSWMP and will assess the status of the Implementation Plan components. OSWM will provide a written report to District members regarding the results of the audit and recommendations for action by April 1 for the reporting period ending the preceding December 31.

This report was developed to address this key initiative. The 2006 Plan Review is the initial review of the Plan adopted in 2003. The review does not work well in April due to reporting cycles and other factors. Future biennial reviews will be targeted to occur in September and October.

10. **The District will proactively plan for solid waste management services in natural and manmade disasters by:**
- A. Seek DEQ pre-approval of an emergency solid waste/debris site(s);**
 - B. Establish mutual aid agreements with other jurisdictions in Northern Virginia for disaster response; and,**
 - C. Include solid waste management planning in the County's emergency management plan.**

Staff sought and received pre-approval of a debris management site from DEQ in July 2003. Since that time, the site has been activated in September 2003 and September 2004 to manage debris wastes from hurricanes. OSWM staff also participated with other County Agencies and Regional Agencies to establish a mutual aid agreement with other jurisdictions in Northern Virginia for disaster response. This agreement was ratified in October 2005. Staff is currently working with the third segment of this initiative with emergency response planners.

11. **District members will request that the Northern Virginia Regional Commission (NVRC) or the Metropolitan Washington Council of Governments (MWCOC) conduct a regional C&D waste generation and characterization study, to be completed by December 2004 to assess C&D disposal demand and supply.**

The County did formally present this request to NVRC and a report was generated by NVRC in September 2003. The report was based on data provided by facilities to the Virginia Department of Environmental Quality in prior years. To date, there has been no detailed regional generation and disposition study initiated for the Metropolitan area.